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The Role and Responsibility of Auditors in Prevention and Detection of Fraudulent Financial Reporting

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Abstract

This research examines the roles and the responsibilities of the key stakeholders of the financial reporting in the prevention and detection of fraud. The methods used and types of transactions most vulnerable to fraudulent financial reporting are examined. For the need of the empirical part of the paper, the questionnaire survey was conducted. The respondents, external auditors, evaluated how often they encounter circumstances indicating the possibility of fraud. In accordance with the conducted research the most common technique used to fraudulent financial reporting involved overstatement of assets.

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Keywords: fraud, fraudulent financial reporting, asset misappropriation, prevention, detection, auditor

1. Introduction

All over the world organizations face the problem of fraudulent activities, which can take many forms. Due to numerous accounting scandals, confidence in the reliability and the objectivity of the financial statements of interested parties has been significantly reduced. Management, boards of directors, audit committees, external auditors and internal auditors have a significant role in ensuring the reliable financial reporting. In this paper the roles and responsibilities of these key stakeholders in the prevention and detection of fraudulent financial reporting in the companies is examined. This paper offers a description of some main characteristics of the fraud and explains the most commonly used classifications of fraud. Most academic studies are conducted on external fraud (Jans et al.,

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2009, p.1). Thus, taking into account the deficiency of research in the field of internal fraud and the need for such research, this paper is concentrated on the fraudulent activities, such as fraudulent financial reporting and asset misappropriations, committed by the employees of the company. In addition, the purpose of this paper was to gather information on types of the transactions that are the most vulnerable to the fraudulent financial reporting, which is done through a review of existing research and conducted empirical research in Croatian companies. For the needs of the empirical part of the paper, a questionnaire survey was conducted. The sample of subjects consisted of external auditors, who were asked to provide information on the fraud cases familiar to them. The respondents also evaluated how often they encounter circumstances indicating the possibility of fraud.

2. Theoretical background

2.1. Overview of the research in the field of fraudulent financial reporting

Fraud can be defined in many different ways. „In business environment fraud is an intentional deception, misappropriation of a company's assets, or manipulation of its financial data to the advantage of the perpetrator“ (Hall, 2007, p. 118). In accordance with the International Standards on Auditing (ISA) fraud is "an intentional act by one or more individuals among management, those charged with governance, employees, or third parties, involving the use of deception to obtain an unjust or illegal advantage" (IASB, 2009). The Institute of Internal Auditors' (IIA's) defines fraud as "any illegal act characterized by deceit, concealment, or violation of trust. These acts are not dependent upon the threat of violence or physical force. Frauds are perpetrated by parties and organizations to obtain money, property, or services; to avoid payment or loss of services; or to secure personal or business advantage" (IIA, 2009, p. 4). Singleton et. al. stated that there is no definite and invariable rule that can be laid down as a general proposition in defining fraud, as it includes surprise, trick, cunning and unfair ways by which another is cheated (Singleton et al., 2006, p. 1). Fraud always involves a deliberate action by one person to gain an unfair advantage over another person, and can take many forms (Vaassen, 2004, p.236).

The Association of Certified Fraud Examiners (ACFE) has identified three primary categories of fraud based on the numerous investigated fraud cases. These are asset misappropriations, corruption schemes and financial statement fraud schemes. According to ACFE, asset misappropriations are those schemes in which the perpetrator steals or misuses an organization's resources. The corruption schemes involve the employee's use of his or her influence in business transactions in a way that violates his or her duty to the employer for the purpose of obtaining a benefit for himself or herself or someone else. Financial statement fraud schemes are those involving the intentional misstatement or omission of material information in the organization's financial reports. (ACFE, 2010) For the purposes of the International Standards on Auditing, although fraud is a broad legal concept, the auditor is concerned with fraud that causes a material misstatement in the financial statements, and accordingly two types of intentional misstatements relevant to the auditor are misstatements resulting from fraudulent financial reporting and misstatements resulting from misappropriation of assets (IASB, 2009).

There are also other ways of classifying fraud. Bologna and Lindquist make the distinction between internal versus external fraud, a classification based on whether the fraud perpetrator is internal or external to the victim company; transaction versus statement fraud, where statement fraud is defined as "the intentional misstatement of certain financial values to enhance the appearance of profitability and deceive shareholders or creditors", while in transaction fraud the intention is asset misappropriation; fraud for versus against the company, where in the first the organization benefits from fraud and in the latter the organization is victimized by it; or management versus non-management fraud, a classification based on the perpetrator's characteristics (Jans et al., 2009, p.3-4). Nevertheless, the most prominent division of fraud is on internal and external fraud, since all of the fore mentioned classifications are actually allocated within internal fraud (Jans et al., 2009, p. 5). This division is directly focused on fraud perpetrator, i.e. depends whether the perpetrator is the employee of the company or is the person from outside the company.

Since intention is necessary in committing fraud and „the only boundaries defining it are those which limit human knavery“(Singleton et al., 2006, p. 1), it is obvious that human is the essential factor in genesis of a fraud. The first to investigate why people commit fraud was American criminologist Donald Cressey in 1950 (Kassem, Higson, 2012, p. 191). As a result of his research the „fraud triangle“ model was developed. This triangle consists of opportunity, motivation and rationalization, elements that are commonly present in fraud. International Standard on Auditing 240 accepted these three elements and stated that fraud, whether fraudulent financial reporting or misappropriation of assets, involves incentive or pressure to commit fraud, a perceived opportunity to do so and some rationalization of the act (IASB, 2009). According to Rezaee and Riley, financial statement fraud occurs for a wide variety of reasons, including when motives are combined with opportunity (Rezaee, Riley, 2010, p. 57). Motivated person, being able to rationalize his or her behaviour, will find a way to commit fraud. In order to improve both fraud prevention and detection, Wolfe and Hermanson propose a person's capability as the fourth element, in addition to aforementioned elements of fraud triangle, which creates the "Fraud diamond". Authors of this model believe that the right person with right capabilities in the right position is also required before the fraud can take place. (Wolfe, Hermanson, 2004, p. 38).

Fraud has a negative impact on the organizations in different ways, including financial, reputational, psychological, and social (IIA, 2009, p. 5). Fraud causes tremendous losses to the business world (Seetharaman et al., 2004, p. 1055). Since many fraudulent schemes remain undiscovered, or months and even years may pass till they are discovered, and because there are often no reports of fraud, it is very difficult to calculate the exact amount of losses due to fraud. It is estimated that the typical organization's annual loss of revenues is 5% (ACFE, 2014, p. 4).

There is little academic research in the field of financial fraud investigations and assets misappropriation. Most of the research was carried out by the professional organizations. The report *Fraudulent Financial Reporting: 1987–1997 – An Analysis of U.S. Public Companies* commissioned by *the Committee of Sponsoring Organizations of the Treadway Commission* (COSO) provides a comprehensive analysis of fraudulent financial reporting occurrences during the 11 year period. This report, which was based on the detailed analysis of approximately 200 financial statement fraud cases, identified that cumulative amounts of frauds were relatively large in the light of the relatively small sizes of the companies involved. Most frauds were not isolated to a single fiscal period. Typical financial statement fraud techniques involved the overstatement of revenues and assets. In accordance with the study the companies committing fraud generally were small, the frauds went to the very top of the organizations, the audit committees and boards of the fraud companies appeared to be weak, a significant portion of the companies was owned by the founders and board members, severe consequences resulted when companies committed fraud, including bankruptcy, significant changes in ownership, and delisting by national exchanges. (Beasley et. al., 1999)

Subsequently COSO sponsored study *Fraudulent Financial Reporting: 1998-2007 - An Analysis of U.S. Public Companies* to provide an extensive updated analysis of the financial statement fraud occurrences affecting U.S. public companies. Some of the key findings of this study, which was based on 347 alleged cases of public company fraudulent financial reporting, are: the companies allegedly engaging in financial statement fraud had median assets and revenues just under $100 million, the SEC named the CEO and/or CFO for some level of involvement in 89% of the fraud cases, the most common fraud technique involved improper revenue recognition, followed by the overstatement of existing assets or capitalization of expenses, relatively few differences in board of director characteristics existed between firms engaging in fraud and similar firms not engaging in fraud, 26% of the fraud firms changed auditors between the last clean financial statements and the last fraudulent financial statements, long-term negative consequences of fraud were apparent. (Beasley et. al., 2010)

Since 1996 *The Association of Certified Fraud Examiners* (ACFE) periodically investigated methodologies, cost and perpetrators of fraud within organization and publishes results in *Report to the Nations on Occupational Fraud and Abuse.* The latest global 2014 Report is based on the results of 1,483 *Certified Fraud Examiners* responses to the online survey in which respondents were asked to provide detailed information of the single largest fraud case they had investigated in period between January 2012 and the time of survey participation. According to the report, asset misappropriation was the most common (85% of cases) type of occupational fraud, as well as the least costly, while financial statement fraud involved only 9% of cases, but those cases had the greatest financial impact. In accordance with report, the median duration for all categories of occupational fraud was 18 months, and most cases were detected by a tip. The study also highlighted that the median loss of frauds tends to rise with the age, while the age distribution of fraudsters fits a bell curve model. Study also indicated that the largest group of the fraud perpetrators had been employed by their targets between one and five years before committing their crimes. According to the study, the proportion of males rises as authority levels increase and males consistently cause larger losses, even when they occupy similar positions as females. The study indicated the strong correlation between a fraudster's level of authority and the financial impact of the fraud, the higher the perpetrator's level of authority, the greater fraud losses tend to be. (ACFE, 2014)

According to KPMG's analysis of 596 fraudsters member firms investigated between 2011 and 2013, misappropriation of assets was the most common type of fraud by a large margin, of which embezzlement; procurement and payroll fraud were frequently employed. Revenue or assets gained, fraudulent financial reporting and expenses or liabilities appeared in moderate to large amounts. Based on KPMG's study, the typical fraudster is 36 to 45 years of age, is generally acting against his/her own organization, and is mostly employed in an executive, finance, operations or sales/marketing function. He/she holds a senior management position, was employed in the organization in excess of six years and, in committing the fraud, frequently acted in concert with others. Study concluded that the type of fraud and the type of fraudster are continually changing, especially due to the growing use of technology by fraudsters (KPMG, 2013).

The PwC's 2014 Global Economic Crime Survey, which was based on the responses of over 5,000 respondents, stated that accounting fraud had always been one of the major crimes reported in their surveys. In 2014 22% of respondents reported experiencing accounting fraud. On the other hand, according to the study, asset misappropriation is by far the most common economic crime experienced by the organisations reporting any fraud (69% of cases). In profiling the main perpetrator of the most serious fraud committed, respondents reported that the main fraudster was internal in 56%, and external in 40% of cases. Results of this study indicated that the typical internal fraudster is middle-aged male with a college education or higher who have substantial tenure with the organisation, and with 6 or more years of experience. (PwC, 2014)

It is obvious that fraudulent activities are a broad problem encountered by companies across the globe. In confrontation with the fraud it is necessary to establish strong internal control systems, because inadequate internal controls present an opportunity for fraud. Although management is responsible for establishing an effective internal controls system, it is also "in a unique position to perpetrate fraud because it possesses the power to override controls, manipulate records, and facilitate collusion by applying pressure to employees and either enlisting or requiring their assistance" (Center for Audit Quality, 2010, p. 5) Therefore, it is essential to determine not only the roles and responsibilities of management, but also other key stakeholders of the financial reporting in the prevention and detection of the fraudulent behaviour in the companies.

2.2. Responsibilities of those charged with governance for prevention and detection of fraudulent financial reporting

The primary responsibility for the prevention and detection of fraud rests with both, those charged with governance of the entity, and management (IASB, 2009). Members of management are responsible for evaluating and managing the company's business risks, including the risk of the financial reporting fraud, implementing and monitoring compliance with the appropriate internal controls to mitigate those risks to an acceptable level (Center for Audit Quality, 2010, p. 6). It is necessary to emphasize the importance of the role of the chief accounting officer in preventing and detecting fraudulent financial reporting, because, "as a member of top management, the chief accounting officer helps set the tone of the organization's ethical conduct; is responsible for the financial statements; generally has primary responsibility for designing, implementing and monitoring the company's financial reporting system; and is in a unique position regarding identification of unusual situations caused by fraudulent financial reporting" (COSO, 1992, p. 5). According to ISA 240, it is important that management, with the oversight of those charged with governance, place a strong emphasis on fraud prevention, which may reduce opportunities for fraud to take place, and fraud deterrence, which could persuade individuals not to commit fraud because of the likelihood of detection and punishment. On the other hand, fraudulent financial reporting often involves the management override of controls that may otherwise appear to be operating effectively (ISA 240). Moreover, since the largest frauds are committed by executives and upper management, according to ACFE study (ACFE, 2014, p. 56), it is essential to determine roles and responsibilities of other stakeholders of the financial reporting in the prevention and detection of fraudulent behaviour in the companies.

Management is accountable to the board of directors or trustees, which provides governance, guidance and oversight (COSO, 1992, p.86). The board of directors has the responsibility for effective and responsible corporate fraud governance, and role of the board is to oversee and monitor management's actions to manage fraud risks. (IIA, 2009, p.10) The board of directors and audit committee of a public company have ultimate responsibility for oversight of the business, including risk management and the financial reporting process (Center for Audit Quality, 2010, p. 7). Audit committee supervises the work of internal auditors and cooperates with external auditors.

Role and responsibility of internal auditors for fraud are defined in Internal Auditing Standards. According to IIA Standards, internal auditors must have sufficient knowledge to evaluate the risk of fraud and the manner in which it is managed by the organization, but are not expected to have the expertise of a person whose primary responsibility is detecting and investigating fraud. According to IIA Standards, internal auditors must evaluate the potential for the occurrence of fraud and how the organization manages fraud risk. (IIA, 2013) The internal auditor's roles in relation to fraud risk management could include initial or full investigation of suspected fraud, root cause analysis and control improvement recommendations, monitoring of a reporting/whistleblower hotline, and providing ethics training sessions (IIA, 2009, p.11). According to IIA Standards the chief audit executive must report periodically to senior management and the board on significant risk exposures and control issues, including fraud risks, governance issues, and other matters needed or requested by senior management and the board. The importance of internal audit in the prevention and detection of fraud is identified in the ACFE global study, according to which internal audit is vital in catching frauds early and limiting their losses. According to the same study, the most common detection method for cases of occupational fraud is tips, followed by management review and internal audit.

External auditor is, in accordance with the International Standards on Auditing, responsible for obtaining reasonable assurance that the financial statements taken as a whole are free from material misstatement, whether caused by fraud or error. When obtaining reasonable assurance, the auditor is responsible for maintaining professional scepticism throughout the audit, considering the potential for management override of controls and recognizing the fact that audit procedures that are effective for detecting error may not be effective in detecting fraud. According to ISA 240, the auditor may suspect or, in rare cases, identify the occurrence of fraud, but does not make legal determinations of whether fraud has actually occurred. (ISA 240) In accordance with ACFE's 2014 Global study, external audits are implemented by a large number of organizations (as they were present in more than 80% of the fraud cases), but they present the least effective control in combating occupational fraud. Such audits were the primary detection method in just 3% of the reported fraud cases reported. Furthermore, although the use of independent financial statement audits was associated with reduced median losses and durations of fraud schemes, these reductions were among the smallest of all of the anti-fraud controls analysed in the study. Consequently, the study concludes that independent audits serve as a vital role in organizational governance, but data indicates that they should not be relied upon as organizations' primary anti-fraud mechanism. According to ISA 240, the auditor's ability to detect a fraud depends on factors such as the skilfulness of the perpetrator, the frequency and extent of manipulation, the degree of collusion involved, the relative size of individual amounts manipulated, and the seniority of those individuals involved. While the auditor may be able to identify potential opportunities for fraud to be perpetrated, it is difficult for the auditor to determine whether misstatements in judgment areas such as accounting estimates are caused by fraud or error. However, because of their expert knowledge, external auditors are often in great position to provide useful perspectives on best practices in financial reporting and controls, including the mitigation of the fraud risks (Center for Audit Quality, 2010, p.8).

3. Empirical research of fraudulent financial reporting – evidence from Croatia

3.1. Data and methodology

In order to gather information on the fraudulent financial reporting in Croatian companies, a questionnaire survey[†] was conducted. The sample of subjects consisted of external auditors, who were asked to provide information on the fraud cases, committed in medium- and large-sized companies, familiar to them. Accordingly, respondents provided data of common fraudulent financial techniques and some main characteristics of the fraud perpetrator. Moreover, the respondents evaluated how often they encounter circumstances indicating the possibility of fraud. As a part of the survey, external auditors also assessed, according to their opinion and professional experience, the effectiveness of some specific measures in prevention of fraud. The focus of the research was on the

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[†] The survey questionnaires were created in the SurveyMonkey programme and respondents were sent a link to the electronic version of the questionnaire via e-mail. Surveyed questionnaires were processed by means of statistical package PASWStatistics, version 18.

fraudulent financial reporting and the asset misappropriations committed by the employees of the victimized company.

Methods used to analyse the collected data were adjusted to the variables which were formed through the questions and statements. First part of the questionnaire consisted of some basic information about the respondents. In the second part of the questionnaire, circumstances indicating the possibility of financial reports containing significant misstatements as a result of fraud were analysed. Therefore the variable *Examples of Circumstances that Indicate the Possibility of Fraud* was formed. The specified variable was formed as an unweighted average of statements referring to circumstances indicating the possibility that financial statements contain significant misstatements as a result of fraud. Statements, which are part of the International Standard on Auditing 240 – The Auditor’s responsibilities relating to fraud in an audit of financial statements (ISA, 2009), are formed on the bases of examples of circumstances that indicate the possibility of fraud. Examples of circumstances, which are divided into four groups in the ISA (International Standard on Auditing), were modified for the purpose of this survey, i.e. simplified and adapted to the survey scale. The statistical indicator of reliability, *Cronbach's alfa-coefficient*, which shows how precisely the chosen statement describes the observed variable was used for checking reliability of the measuring instrument. *Cronbach's alfa-coefficient* equals 0.889 for the circumstances which indicate the possibility of fraud variable, indicating an adequate level of reliability of the measuring instrument. On the Likert scale from 0 to 5 (where 0 means never, and 5 means very often) respondents evaluated how often they encounter circumstances indicating the possibility of fraud. For the purpose of evaluating how often respondents encountered certain fraudulent financial techniques, again Likert scale from 0 to 5 (where 0 means never, and 5 means very often) was used. In order to gather data on fraud perpetrator’s profile, third part of the questionnaire consisted of questions about fraud which respondents detected themselves or were known to them from their auditing practices.

3.2. Empirical results

During the time of the survey (June 12 – July 21, 2012) 55 questionnaires were acquired. However, after eliminating the incomplete questionnaires and those not satisfying the set criteria, the final number of processed questionnaires was 41. The following information is given in connection with the characteristics of the respondents. Most of the respondents were employed in small audit firms (78%), followed by medium-sized firms (20%), and the smallest number in large audit firms (2%). Sixty-six percent of respondents had over 5 years of experience in auditing. While performing audit activities, 54% of respondents stated that they were under pressure from the client when they were supposed to express "qualified opinion". 22% of respondents stated that they never gave "qualified opinion". On the question, if the companies to which they had given “qualified opinion” engaged them to perform audit afterwards, 46% of auditors responded that they were still engaged, while 41% of auditors were engaged only in some cases.

On the Likert scale from 0 to 5 (where 0 means never, and 5 means very often) respondents evaluated how often they encountered circumstances indicating the possibility of fraud. Examples of circumstances indicating the possibility that the financial statements contain a material misstatement resulting from fraud, which the auditors most frequently encountered were, last-minute adjustments that significantly affect financial results (20% of respondents met very often and 34% often), followed by fewer responses to confirmations than anticipated or a greater number of responses than anticipated (12% very often, and 37% often) and unusual delays by the entity in providing requested information (10% or respondent met very often and 32% often).

Table 1. Auditors’ perception regarding circumstances indicating the possibility of fraud.

Statement	0	1	2	3	4	5	Rating Average
Transactions that are not recorded in a complete or timely manner or are improperly recorded as to amount, accounting period, classification, or entity policy.	2	3	8	12	15	2	2,98
Unsupported or unauthorized balances or transactions.	1	8	10	11	10	2	2,64
Last-minute adjustments that significantly affect financial results.	1	5	8	6	14	8	3,21

Tips to the auditor about alleged fraud.	15	10	8	8	1	0	1,29
Missing documents.	2	11	10	11	8	0	2,29
Documents that appear to have been altered.	12	10	7	8	5	0	1,62
Unavailability of other than photocopied or electronically transmitted documents when documents in original form are expected to exist.	3	9	13	9	8	0	2,24
Fewer responses to confirmations than anticipated or a greater number of responses than anticipated.	2	7	6	7	15	5	2,98
Missing assets of significant magnitude.	9	14	11	6	2	0	1,48
Undue time pressures imposed by management to resolve complex or contentious issues.	5	7	10	6	12	2	2,45
Complaints by management about the conduct of the audit or management intimidation of engagement team members.	9	10	10	9	3	1	1,76
Unusual delays by the entity in providing requested information.	2	5	7	11	13	4	2,95
Denial of access to key IT operations staff and facilities, including security, operations, and systems development personnel.	14	15	5	5	3	0	1,24
An unwillingness to add or revise disclosures in the financial statements to make them more understandable.	4	8	9	13	5	2	2,32
An unwillingness to address identified deficiencies in internal control on a timely basis.	3	5	13	10	7	3	2,54
Frequent changes in accounting estimates that do not appear to result from changed circumstances	3	9	12	10	3	4	2,32
Tolerance of violations of the entity's code of conduct.	10	7	10	11	2	1	1,78

According to the conducted research the most common techniques used for fraudulent financial reporting involved improper techniques to overstate assets and improper techniques to underestimated liabilities. Mostly, assets are overstated by recording fictitious assets or assets not owned, or by capitalizing items that should be expensed. The most common techniques used for understatement of expenses included: avoided expenses recording, failed to record uncollectable receivables and failed to record expenses for provision risk and losses, while the most common technique used for overstatement of expenses involved improperly time recognition of the costs. In order to decrease revenues companies do not record revenues at the end of the year. According to the conducted survey companies often accelerate revenue recognition, record fictions revenues or record double revenues in order to increase financial result at the end of the business year. With regard to misappropriations of assets, respondents stated that the theft of inventories was more common than the theft of long-term assets or cash.

In the last group of questions, respondents provided information on the fraud cases, committed in medium- and large-sized companies, familiar to them. After eliminating the incomplete questionnaires and those not satisfying the set criteria, the final number of processed questionnaires was 13. Out of 13 identified fraudsters, 8 committed a fraudulent financial reporting and 5 asset misappropriations. Six cases of fraud occurred in medium-size and 7 in large-size business organisations. Eleven frauds were committed by higher positioned persons, whereas one deception was executed by a lower positioned employee. Most fraud perpetrators (N=10) had a university degree, two had a Master of Science degree, and one was the secondary-school graduate. As regards fraudsters' age at the time of committing fraud, 8 were in the age group of 41-50 years, 3 were over 50 years of age, and 2 were from the 31-40 years of age group. Before fraud, 5 fraudsters worked for the enterprise over 10 years, 4 perpetrators worked for the company 6-10 years, and 4 of them between 1 and 5 years. Men were fraudsters in 11 fraud cases. In most cases the fraud was committed in collusion with a person within the company. In seven cases, fraud was disclosed by independent auditors, and 4 by the company's employees. After the discovery of fraud, commonly (for 7 perpetrators), no sanctions were introduced. Only two fraudsters were dismissed and/or criminal charges were filed against them.

External auditors also assessed, according to their opinion and professional experience, the effectiveness of some specific measures in prevention of fraud, on the Likert scale from 1 to 5 (where 1 means extremely inefficient and 5 means extremely efficient). Respondents generally agreed that the establishment of an appropriate number of internal controls in the company have a significant impact on the prevention of fraudulent financial reporting (the average grade at the level of all respondents was 4.0). According to the study, auditors believe that the most effective measures in fraud prevention are surprise internal audits and forensic audits (both with rating average of 4,02), followed by measures such as job rotation and mandatory vacation (average rating 4,00), fraud trainings for managers and employees (average rating of 3,98), secured system of anonymous tips through which employees can report the fraud and a positive working environment with no tolerance of fraudulent behaviour (both rated with 3,96), external audit of financial statements (average rating of 3,89), management review (average rating of 3,72), independent audit committee (average rate of 3,59) and code of ethics (average rate of 3,48).

4. Conclusion

Fraudulent activities, such as fraudulent financial reporting and asset misappropriation, are a broad problem encountered by companies across the globe. According to the conducted studies, asset misappropriation is the most common form of fraud, while fraudulent financial reporting, although it does not appear so often, causes the greatest losses. In accordance with the theoretical and empirical research the most common technique used for fraudulent financial reporting involved overstatement of assets. It is necessary to establish strong internal control systems, and to determine roles and responsibilities of all parties in financial reporting in prevention and detection of fraud. The primary responsibility for the prevention and detection of fraud relies on management. However, in addition to management, boards of directors, audit committees, external auditors and internal auditors, all have an important role and responsibility in ensuring reliable financial statements.

References

Association of Certified Fraud Examiners, 2010. Report to the Nation on Occupational Fraud & Abuse, 2010 Global Fraud Study. ACFE.

Association of Certified Fraud Examiners, 2014. 2014 Report to the Nations on Occupational Fraud and Abuse. ACFE.

Beasley, M. S., Carcello, J. V., Hermanson, D. R., (1999). Fraudulent Financial Reporting: 1987-1997, An Analysis of U.S. Public Companies. New York: COSO.

Beasley, M. S., Carcello, J. V., Hermanson, D. R., Neal, T. L., (2010). Fraudulent Financial Reporting: 1998-2007, An Analysis of U.S. Public Companies. New York: COSO.

Center for Audit Quality, (2010). Deterring and Detecting Financial Reporting Fraud - A Platform for Action. Center for Audit Quality, Washington.

Hall, J. A., (2007). Accounting Information Systems. Fifth Edition. Cincinnati: Thomson South-Western College Publishing.

Jans, M., Lybaert, N., Vanhoof, K., (2009). A Framework for Internal Fraud Risk Reduction at IT Integrating Business Processes:The IFR Framework. *The International Journal of Digital Accounting Research*. Vol. 9, 2009.

Kassem, R., Higson, A., (2012). The New Fraud Triangle Model. *Journal of Emerging Trends in Economics and Management Sciences* (JETEMS), Vol. 3, No. 3, pp.191-195.

KPMG,2013. Global profiles of the fraudster. White-collar crime – present and future. KPMG.

PwC, 2014. 2014 Global Economic Crime Survey, Economic crime: A threat to business globally. PwC.

Rezaee, Z., Riley, R., (2010). Financial statement fraud: prevention and detection, second edition. John Wiley & Sons, New Jersey.

Seetharaman, A., Senthivelmurugan, M., Periynayagam, R., (2004). Anatomy of computer accounting frauds. *Managerial Auditing Journal*, 19(8), p. 1055-1072.

Singleton, T., Singleton, A., Bologna, J., Lindquist, R., (2006). Fraud Auditing and Forensic Accounting, 3rd edition, John Wiley & Sons, New Jersey.

The Committee of Sponsoring Organizations of the Treadway Commission, 1992. Internal Control – Integrated Framework. Executive Summary Framework Reporting to External Parties. COSO.

The Institute of Internal Auditors, 2009. Internal Auditing and Fraud. IPPF – Practice Guide. IIA.

The Institute of Internal Auditors, 2013. Internal Auditing Standards, IIA.

The International Auditing Standards Board, 2009. International Standard on Auditing No.240: the Auditor’s responsibilities relating to fraud in an audit of financial statements.

Vaassen, E.H.J.,(2004). Accounting Information systems, a Managerial Approach, John Wiley & Sons.

Wolfe, D. T. , Hermanson, D. R., (2004). The Fraud Diamond: Considering the Four Elements of Fraud. *The CPA Journal* 74.12, 38-42.